







Ship's Configuration **Data** Meets **Maintenance Data FLSIC** Record Type 6 Design **Status**

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Mr. Milton Myers
Configuration Management
& Readiness Division Rep









Overview

- Background
- Issue Resolution (Immediate Solution)
- Issue Resolution (Four Components)
- RT6 Phase (1) Accomplishments
- Summary

Background

TODAY'S ENVIRONMENT

- Ship's Configuration Data Managers Database
 - CDMD-OA
- Various Maintenance Databases
 - 3M, ICAS, PMS, etc.
- Shipboard Environment
 - Logistics Database Contains Configuration, Supply and 2 Kilos (partial Material Condition)
- Shore Environment
 - ISSUE No Link Between Material Condition and Ship's Configuration Data

Issue Resolution

Resolution: Merge **Material Condition** & Configuration Data into a <u>single</u> Environment

- Optimal Solution:
 - Consolidate into Enterprise Resource Planning (ERP):
 - Standardize Hierarchical Structure Codes
 - Standardize Naming Conventions
 - Track Total Maintenance Cost

...The Challenge...

Schedule Delays: due to ERP Convergence

Issue Resolution (cont.)

Intermediate Solution:

- Develop New Record Type in CDMD-OA to Link Material Condition, Configuration & Logistics Data
 - Create New Numbering Structure to Provide Maintenance Community with a Functional Systems Engineering View by War fighting Area
- Design Record Type 6 with ERP End-State Vision
 - Use ERP Terminology & Data Characteristics
- Record Type 6 Data Integrity
 - Technical Warrant Holder (via SEA 05C) designates access to RT6
 - Record Type 6 will be "read only" for all other users

CDMD-OA Record Type 6 Four Key Components

Component One

Design tables in CDMD-OA to accept and process Functional Index Numbers (FINs) with links to Type 2 Equipment Records

Component Two

Material Condition Criteria

- Equipment Operating Criteria (EOC) is metric
- Material Condition based upon Parameters (ranges, pressures, temperatures,

ets) matched to EOC value (0.0 to 1.0)

FIN Recor

d

Type 6Component Four

Component Three

Material Condition History

 Folders of information date stamped and gathered over period of time, used for global data mining

ERP (Object and Info Links

- Linking procedures (EOSS, Casualty, etc)
- Linking Multiple FINs for effective data mining

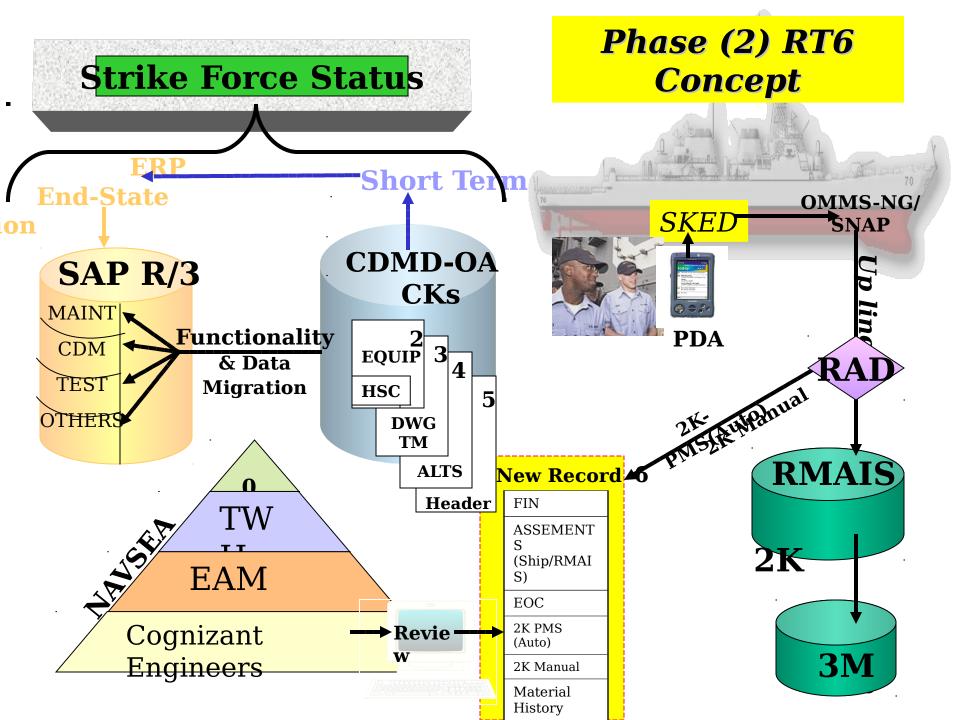
CDMD-OA Record Type 6 Accomplishments (Phase 1)

- Design for Back-End Functions Complete
 - Import program to receive data from FIN prototype database (Complete)
 - Tables designed for populating 20 levels of FIN
 - [1-3][4] [5-6][7][8][9][10-11][12-13][14][15][16-18][19-20]
 - ESWBS-SWLIN-APL-Funct Areas-Sys-Subsys-Comp-SubComp-Variant-Deck-Frame-Centerline- Port/S
 - Edit checks & warning errors for incomplete/out of range values and missing data relationships
 - Tables designed to associate FIN (APL/UIC/Class)
 - Query/Search capabilities (values, FIN, equip, etc.)
 - Tables to collect/maintain/store history data
 - Authorization tables designed (need population)

Summary

- **Proceeding** with Phase (2) of RT6 design:
 - Tables Designed (per) Four Key Components
 - Funding Required to complete Phase (2)
- <u>Updating</u> Software Requirement Specification:
 - Accelerated Front-End design & limited testing to support FLSIC Conference Demonstration
 - More Robust Data required for complete testing
- Software Release Schedule:
 - Planned for Production Release 3.4.0 (June 04)

BACK-UP - Slides



FIN Screen

	FIA F	UNCTIONAL INDEX F	IN			1975 - 1976 - 1976 - 1976 - 1976 - 1976		Locate FIN
	FIN #							Jane 1
		SW434N 6		Functional Area _N PROP	1A	Ship Class	Weig ht Facto r	Critic al
		Subcomponent De	eck	Frame		ARS-50 CG-47		
						CV-63		
	WTA:	Last Name First Hartranft Norme n	Middle	Hartranftjb@		CV-b'/		
	LCM :	Last Name First Name	Middle	Email	Pho	CVN-68		
Click to ee	ISEA:	Last Name First Name	Middle	Email	Pho	DDG-51 LHA-1		
Veight actors	SWBS-S	WLIN APL Code	System		F	MCM-1	58	1.0
	233B Propulsion Diesel		41 1A MPDE	OR			BACK	<u>NEXT</u>

CDMD-OA Record Type 6 Development History

May 2003

SEA 04L5/05N developed FRS/SRS and Funded

Phase (1)

June 2003

Turnover meeting with CAPT Metz

July 2003

SEA 05N Technical staff provided RT6 Programmer (limited) FIN database design structure and sample data for testing (1st Data

October 2003

SEA 04L5/05N meeting to baseline Phase (1) status and Phase (2) plan

November 2003

Status of RT6 testing of 2nd Data Set

December 2003

Review of actions required to develop POA&M/Demo dates